

# HFR / NFR HYDRAULIC CYLINDERS

DOUBLE / SINGLE\* ACTING HYDRAULIC CYLINDER (\*=S/A WITH USE OF A BREATHER)

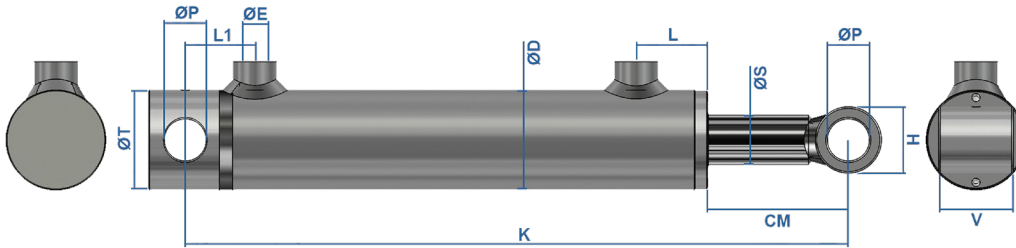
MAX PRESSURE = 210 BAR (CONTINUOUS) ► 250 BAR (INTERMITTENT)

MAX SPEED = 0.5 M/S

OPERATING TEMPERATURE (°C) = +80°C TO -25°C

TUBE MATERIAL = STEEL - ST52.3 - DIN2393 - ISO H9

ROD MATERIAL = STEEL - UNI C45 (SAE 1045) - 25 MICRON (±5) - EN8 GRADE



ORDER CODE	BORE Ø(mm)	D Ø(mm)	S Ø(mm)	K (mm)	STROKE (mm)	E Ø(bsp)	L (mm)	L1 (mm)	CM (mm)	P Ø(mm)	H Ø(mm)	V (mm)	T Ø(mm)	WEIGHT (kgs)
HFR0160050	25	35	16	160	50	1/4"	33	22	31	12.1	25	25	35	1.0
HFR0160100				210	100									1.2
HFR0160150				260	150									1.4
HFR0160200				310	200									1.7
HFR0200050	32	42	20	205	50	1/4"	33	35	51	16.2	30	35	40	1.7
HFR0200100				255	100									2.1
HFR0200150				305	150									2.4
HFR0200200				355	200									2.8
HFR0200250				405	250									3.1
HFR0200300				455	300									3.5
HFR0200400				555	400									4.2
HFR0200500				655	500									4.8
<b>NEW!</b> HFR0200600				755	600									5.6
<b>NEW!</b> HFR0200700				855	700									6.3
NFR1250100	40	50	25	270	100	3/8"	40	38	65	20.25	35	40	50	3.0
NFR1250150				320	150									3.4
NFR1250200				370	200									3.9
NFR1250250				420	250									4.4
NFR1250300				470	300									4.8
NFR1250400				570	400									5.8
NFR1250500				670	500									6.7
NFR1250600				770	600									7.6
NFR1250700				870	700									8.6
NFR1250800				970	800									9.5
<b>NEW!</b> NFR1251000	1170	1000	11.4											
NFR2300100	50	60	30	300	100	3/8"	43	42	85	25.25	40	45	60	4.4
NFR2300150				350	150									5.0
NFR2300200				400	200									5.6
NFR2300250				450	250									6.2
NFR2300300				500	300									6.9
NFR2300400				600	400									8.1
NFR2300500				700	500									9.3
NFR2300600				800	600									10.5
NFR2300700				900	700									11.8
NFR2300800				1000	800									13.0
NFR2300900				1100	900									14.2
NFR2301000				1200	1000									15.5
NFR3300100	60	70	30	300	100	3/8"	50	36	83	25.25	40	45	70	5.6
NFR3300150				350	150									6.3
NFR3300200				400	200									7.0

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NFR3300250	60	70	30	450	250	3/8"	50	36	83	25.25	40	45	70	7.7
NFR3300300				500	300									8.3
NFR3300350				550	350									9.0
NFR3300400				600	400									9.7
NFR3300450				650	450									10.4
NFR3300500				700	500									11.0
NFR3300600				800	600									12.4
NFR3300700				900	700									13.7
<b>NEW!</b> NFR3350100	60	70	35	300	100	3/8"	50	36	83	25.25	40	45	70	5.9
<b>NEW!</b> NFR3350150				350	150									6.7
NFR3350200				400	200									7.4
<b>NEW!</b> NFR3350250				450	250									8.2
NFR3350300				500	300									9.0
<b>NEW!</b> NFR3350350				550	350									10.0
NFR3350400				600	400									10.6
<b>NEW!</b> NFR3350450				650	450									11.3
NFR3350500				700	500									12.1
NFR3350600				800	600									13.7
NFR3350700				900	700									15.2
NFR3350800				1000	800									16.8
NFR3350900				1100	900									18.3
NFR3351000				1200	1000									19.9
NFR4400200	70	80	40	410	200	3/8"	50	46	82	30.25	50	55	80	10.1
NFR4400250				460	250									11.0
NFR4400300				510	300									12.0
NFR4400350				560	350									13.0
NFR4400400				610	400									13.9
NFR4400450				660	450									14.9
NFR4400500				710	500									15.8
NFR4400600				810	600									17.7
NFR4400700				910	700									19.6
NFR4400800				1010	800									21.5
NFR4400900				1110	900									23.4
<b>NEW!</b> NFR4401000				1210	1000									25.4
NFR5400200	80	92	40	410	200	3/8"	60	42	70	30.25	50	55	90	13.0
NFR5400250				460	250									14.2
NFR5400300				510	300									15.3
NFR5400350				560	350									16.4
NFR5400400				610	400									17.5
NFR5400500				710	500									19.8
NFR5400600				810	600									22.0
NFR5400700				910	700									24.3
NFR5400800				1010	800									26.5
NFR5400900				1110	900									28.8
NFR5401000				1210	1000									31.0
NFR6500200				100	115									50
NFR6500300	525	300	25.0											
NFR6500400	625	400	28.5											
NFR6500500	725	500	32.0											
NFR6500700	925	700	39.1											
NFR6500900	1125	900	46.1											
NFR6501000	1225	1000	49.6											

PLEASE NOTE THAT THE 'NFR' CYLINDER RANGE IS NOT AVAILABLE IN RAMPARTS® KIT FORMAT.